

Session I – Permitting Improvements through Technology



Creating Efficiencies through Sustaining Technology and Agency Partnerships

Bureau of Statistics and Plans, Guam Coastal Management Program
Marvin Aguilar, Territorial Chief Planner of Guam
Department of Land Management – *Application Review Committee*
Frank Lujan, Chief Technology Officer, Office of Technology (OTECH)



Geodetic Street Map Web Application



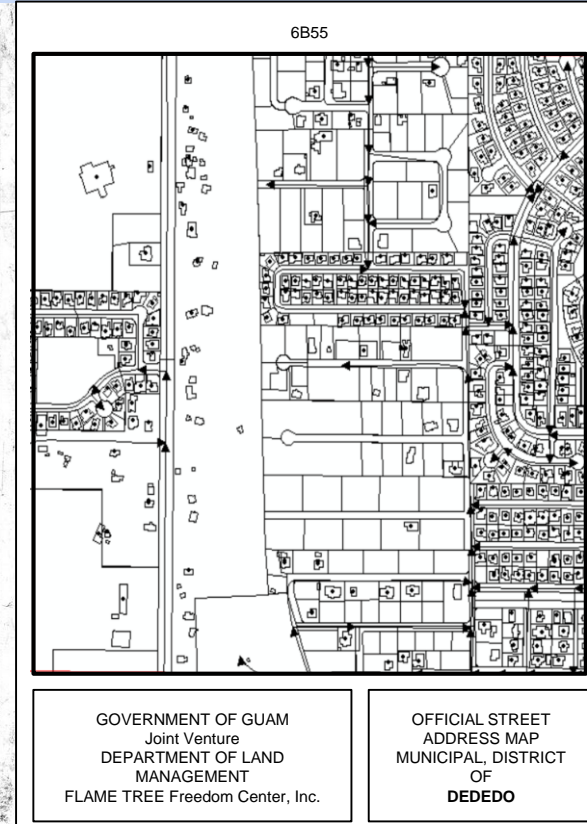
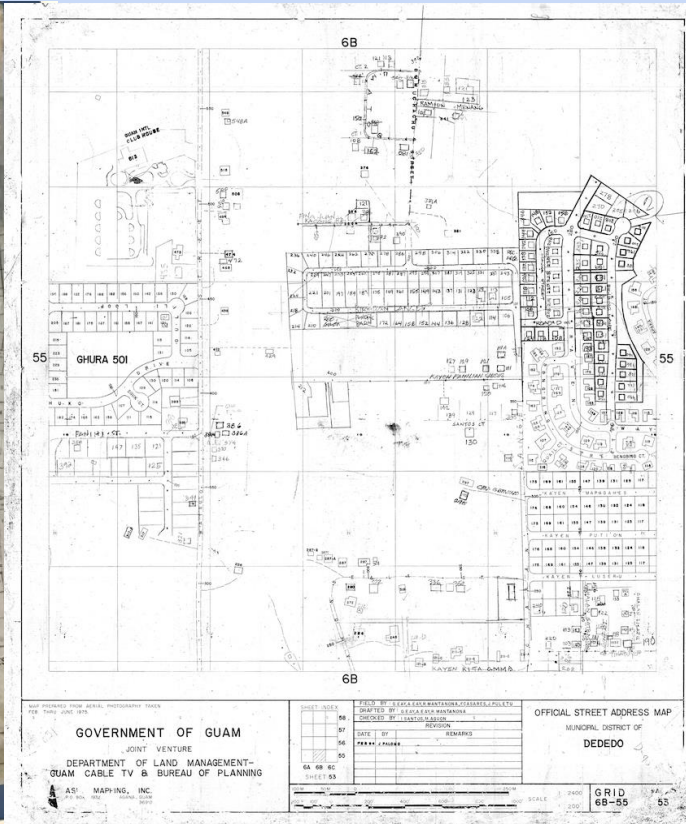
Contract

- OTECH contracted FLAME TREE Freedom Center (FTFC) to update the street mapping system
- REPLACE an antiquated system and create a new baseline standard for street names and assigning house numbers
- System to be provided to
 - GPD to support the emergency dispatch
 - Mayors to give them an application that would allow them to process street name changes more efficiently and provide a tool to help manage the respective villages
 - DPW to replace its paper process and to assign house numbers via geo-referencing

Original Mylars provided by
Department of Public Works

Mylars scanned to be overlayed
on to GIS Application for Updates

Electronically generated, fit to
scale using Satellite imagery



Multiple address are called Route 1, but are differentiated by the place name



Find

Features Locations Linear Referencing

Choose a locator:

PresentLocate

Full Address: 100 RT 1

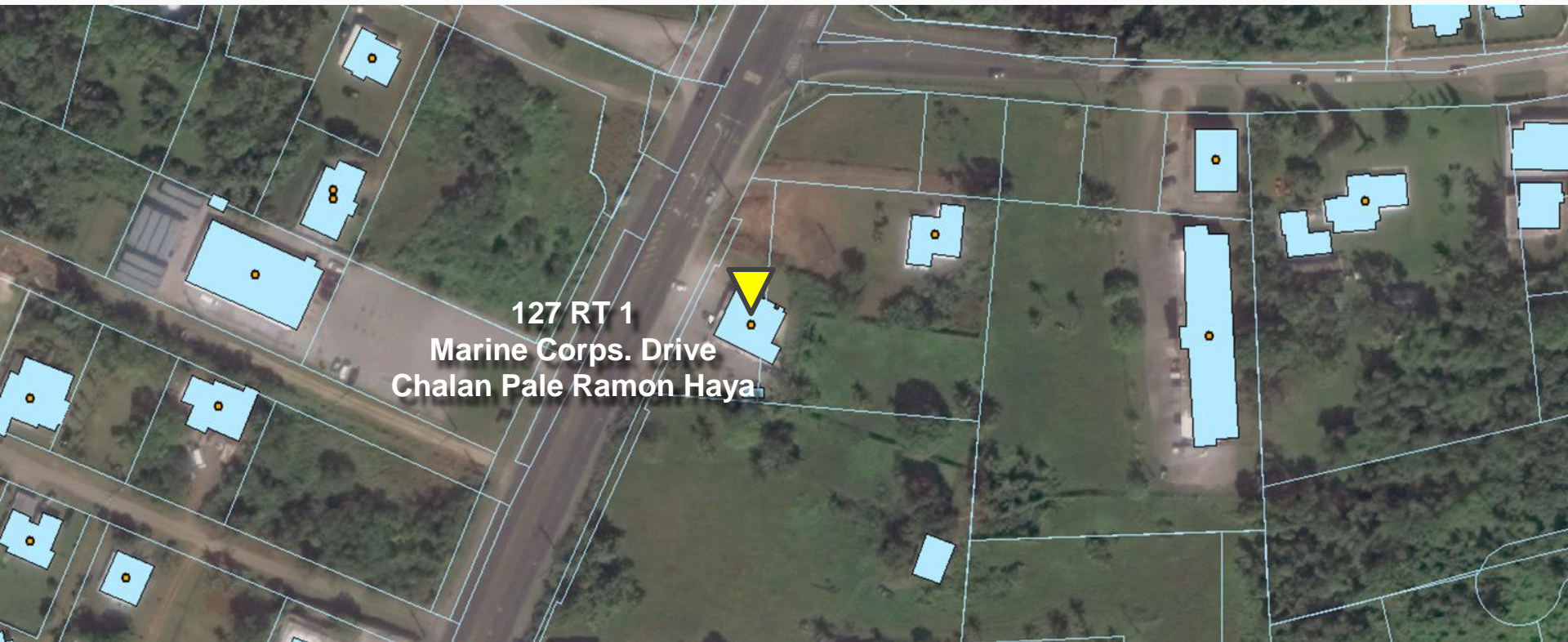
Options...

Right-click a row to show context menu.

Score	Match_addr
100	100 RT 1, SOUTH ASAN OCEANVIEW SIDE
100	100 RT 1, NORTH ASAN CHORITO SIDE
100	100 RT 1, SOUTH YIGO HAYA SIDE
100	100 RT 1, NORTH YIGO LAGU SIDE
90.87	100 S RT 1, SANTA RITA
90.87	100 S RT 1, PITI
90.87	100 N RT 1, PITI
90.87	100 W RT 1, HAGATNA
90.87	100 E RT 1, TAMUNING
90.87	100 S RT 1, TAMUNING
90.87	100 N RT 1, TAMUNING
90.87	100 W RT 1, DEDEDO
90.87	100 E RT 1, DEDEDO
89.04	100 FIRST ST, TAMUNING
89.04	100 FIRST ST, MONGMONG TOTO MAITE
89.04	100 FIRST ST, MANGILAO

16 objects found

This address point was only associated with Marine Corps Drive
- Now it lists all street names AND aliases



Building Footprints

Before



After

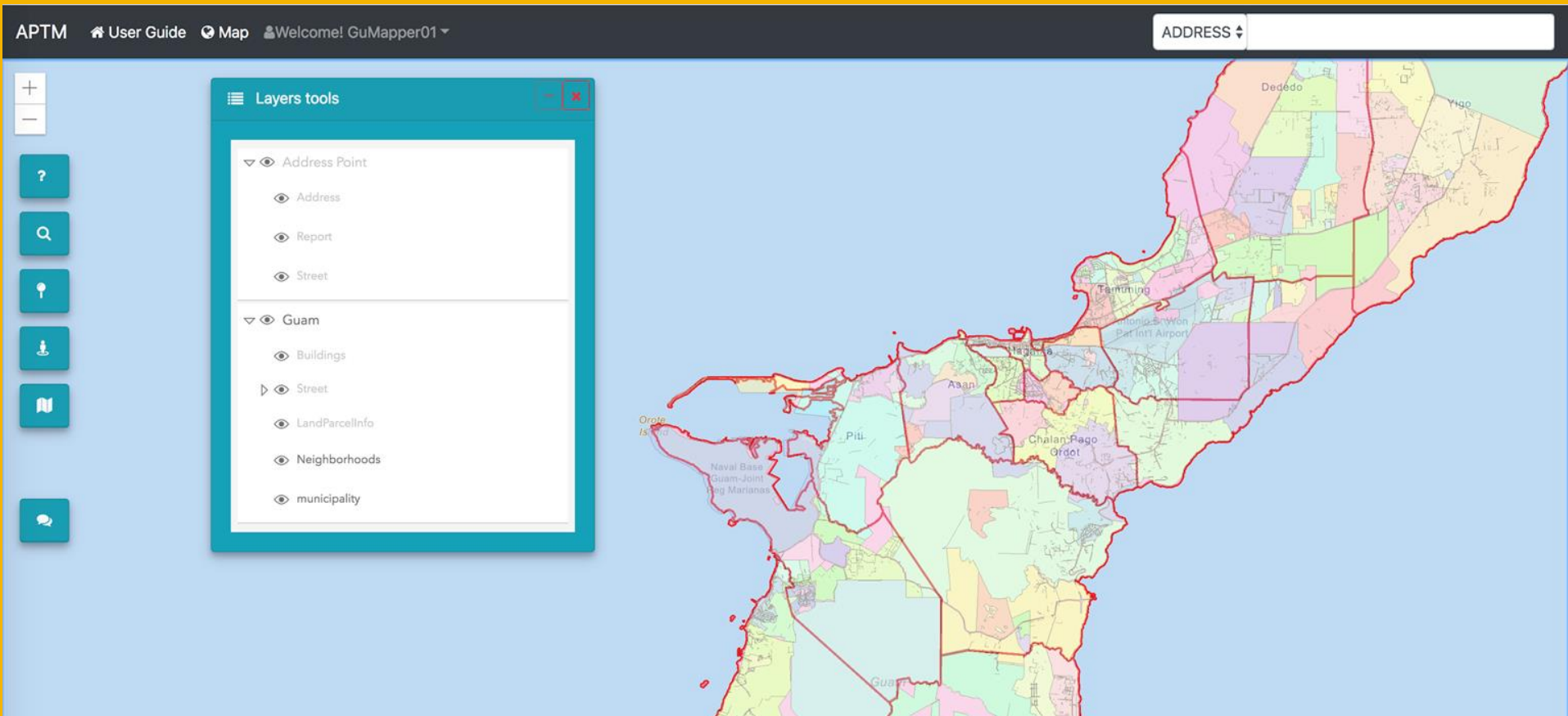




Geodetic Street Map Web Application

Features:

Layer Tools - Choose what layers to see on the map



Features:

BaseMap Tools - Choose different Base Maps

APTM [User Guide](#) [Map](#) Welcome! GuMapper01 ▾

ADDRESS ▾



BaseMap tools



Dark Gray Canvas



Light Gray Canvas



National Geographic



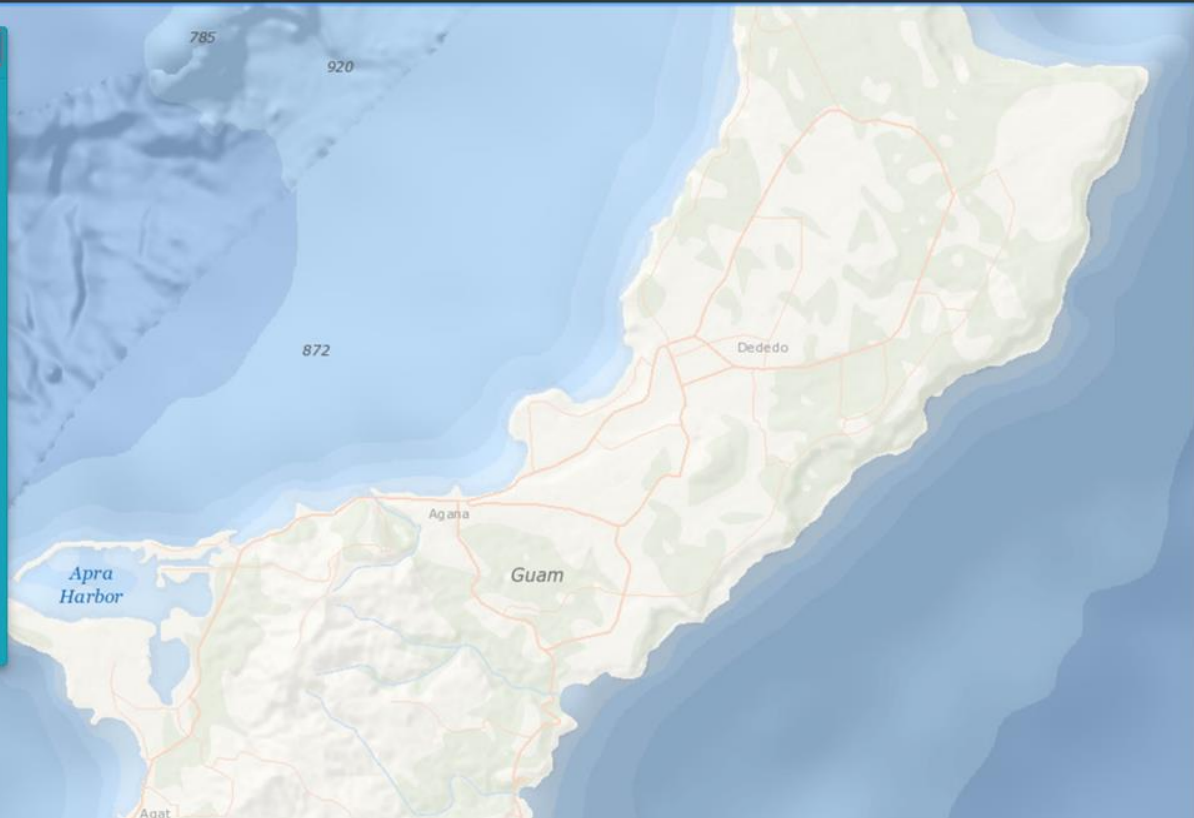
Terrain with Labels



Oceans

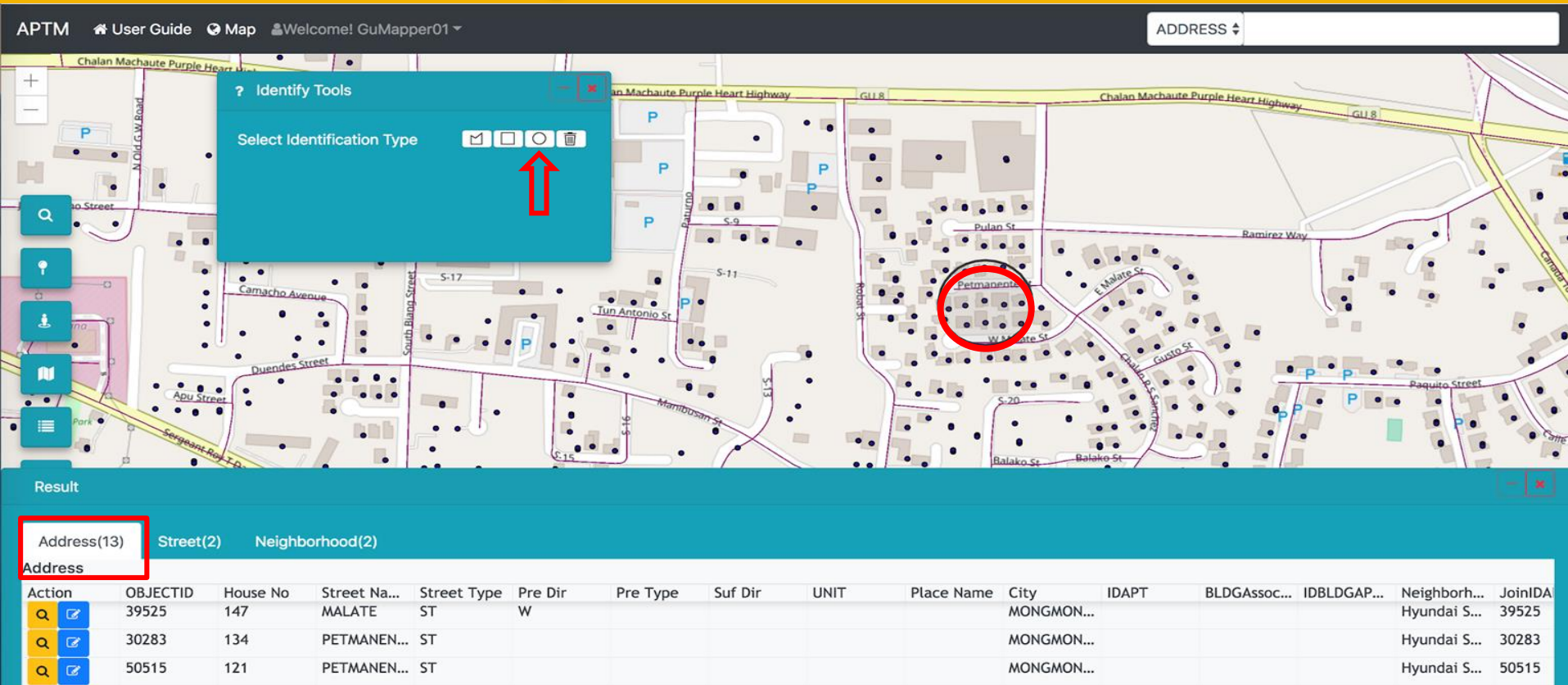


OpenStreetMap



Features:

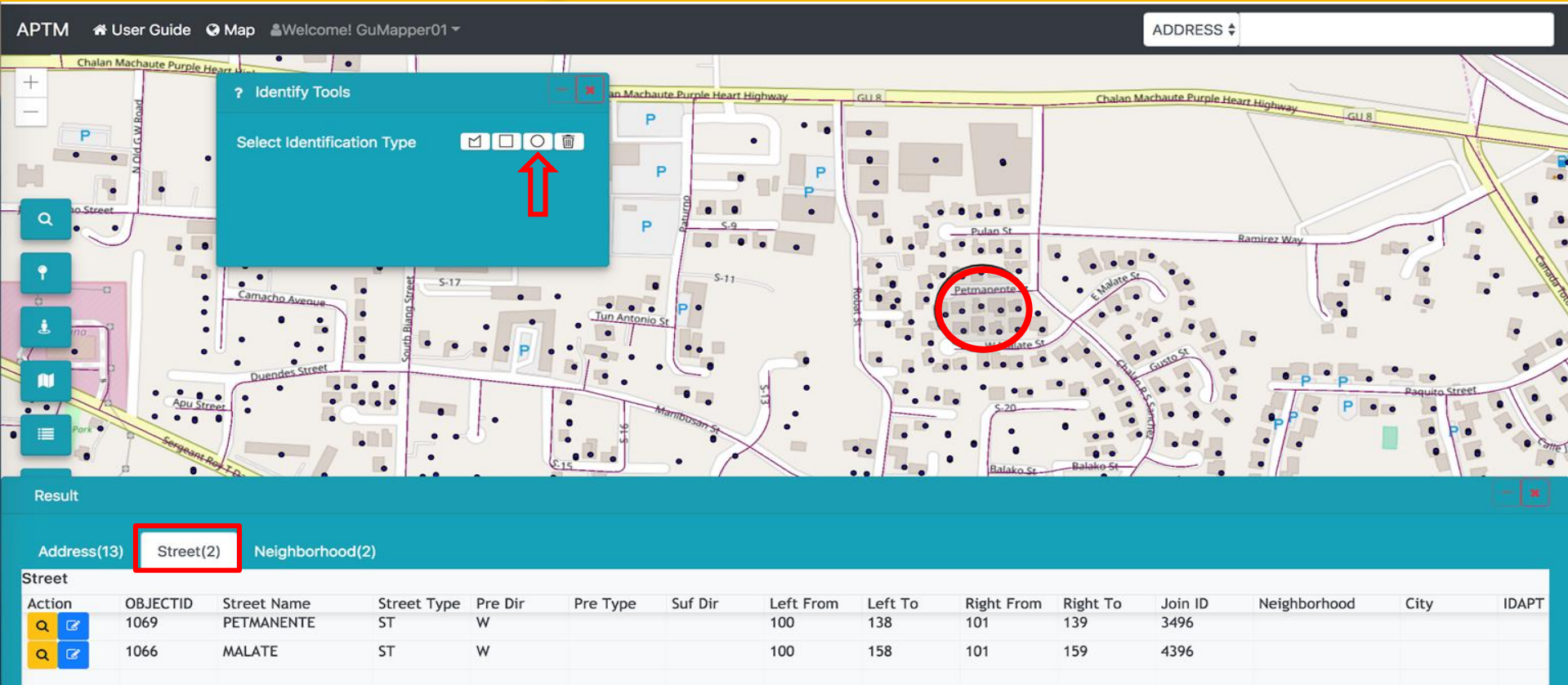
Identify - Look Up Specific Information About a Street, Address Point, or Neighborhood



Features:

Identify - Look Up Specific Information About a Street, Address Point, or Neighborhood

APTM [User Guide](#) [Map](#) Welcome! GuMapper01 ADDRESS ▾







Identify Tools

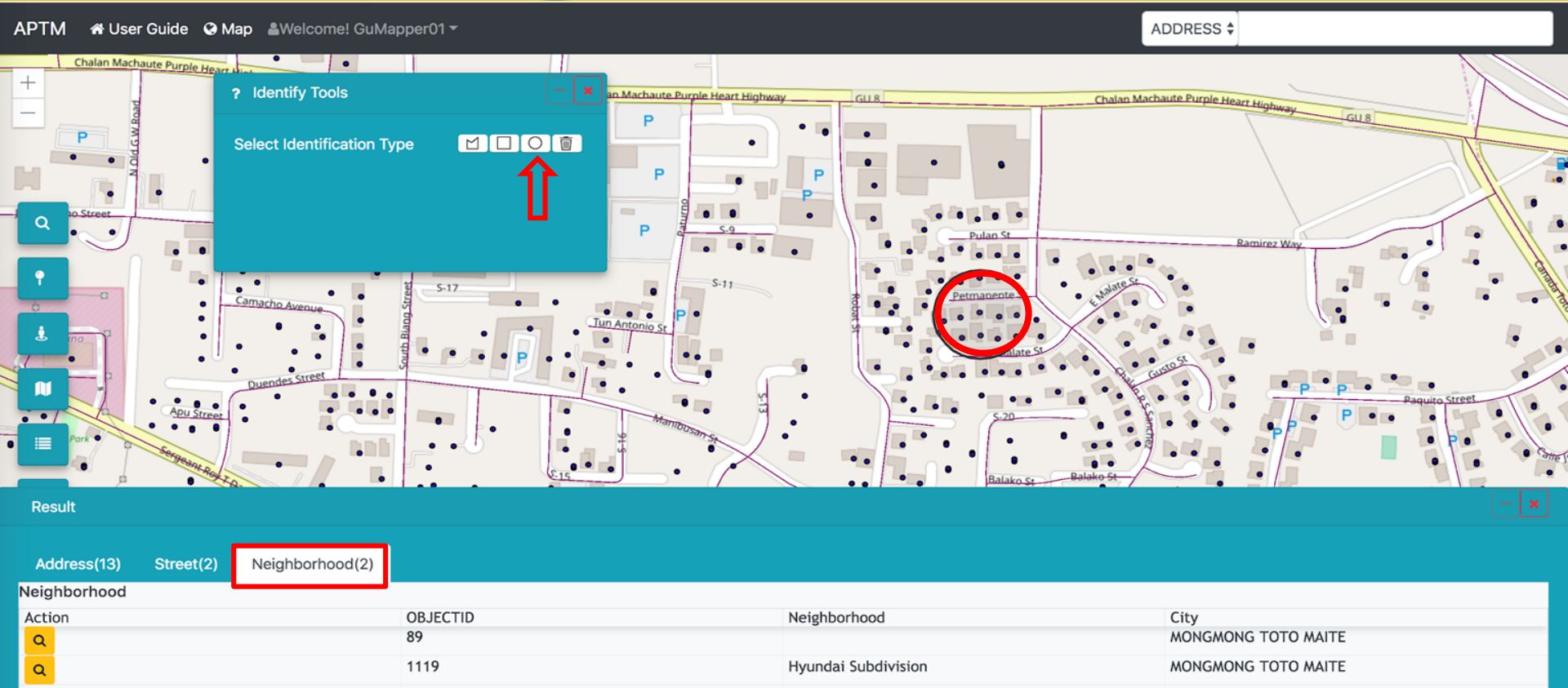
Select Identification Type

Result

Address(13) **Street(2)** Neighborhood(2)

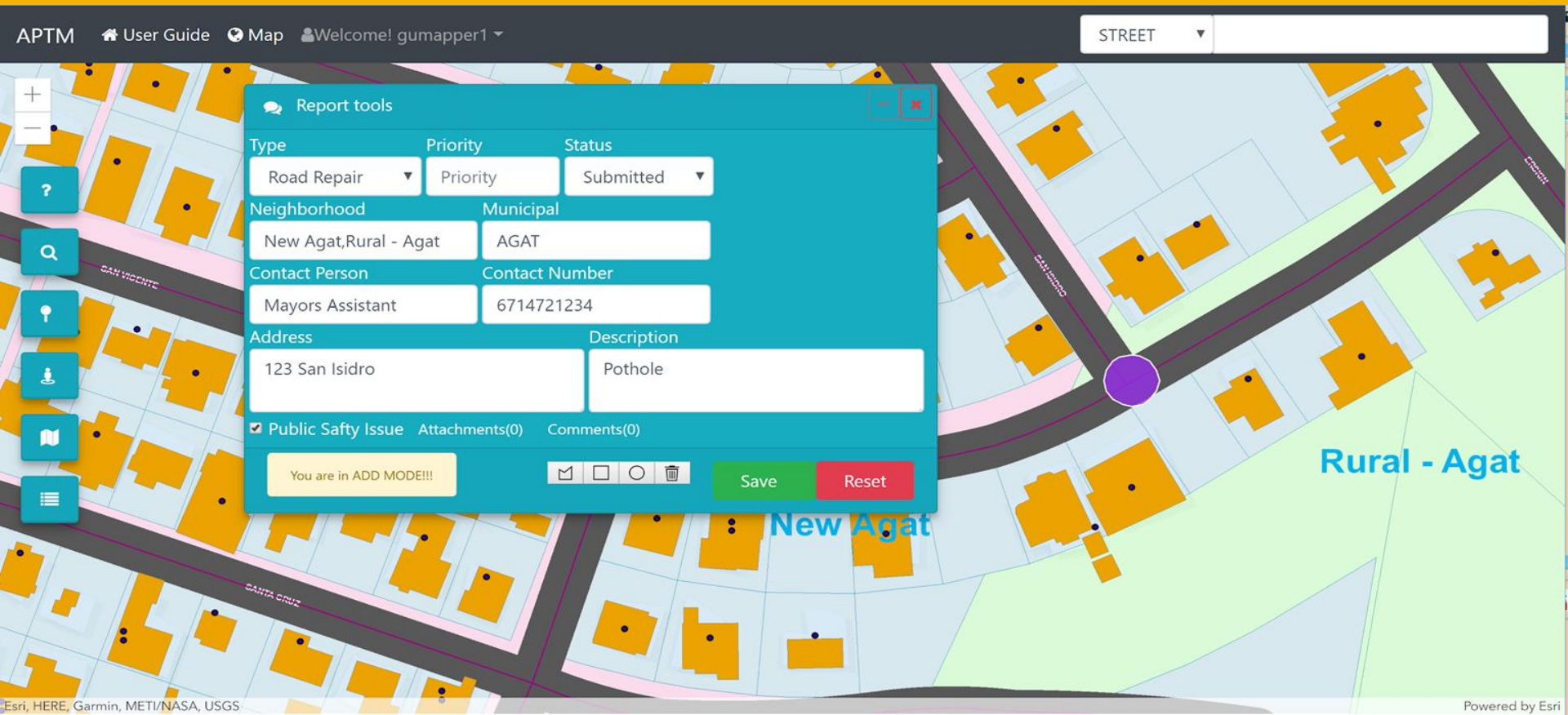
Action	OBJECTID	Street Name	Street Type	Pre Dir	Pre Type	Suf Dir	Left From	Left To	Right From	Right To	Join ID	Neighborhood	City	IDAPT
 	1069	PETMANENTE	ST	W			100	138	101	139	3496			
 	1066	MALATE	ST	W			100	158	101	159	4396			

Identify - Look Up Specific Information About a Street, Address Point, or Neighborhood



Features:

Street Management - Report an Issue



Features:

Street Management- Renaming Streets

APTM

User Guide

Map

Welcome! gumapper1

STREET

+

-

?

 Identify Tools

Select Identification Type

✉

□

○

🗑

Q

📍

•

Result

Street(4)

Neighborhood(2)

Street

Action	OBJECTID	Street Name	Street Type	Pre Dir	Pre Type	Suf Dir	Left From	Left To	Right From	Right To	Join ID	Neighborho...	City
<div>Q</div> <div>✎</div>	2439	SAN ANTO...	ST	W			150	158	151	159	3673		
<div>Q</div> <div>✎</div>	2442	SANTA CRUZ	ST	W			240	318	241	319	4348		
<div>Q</div> <div>✎</div>	2438	SAN ANTO...	ST	W			130	148	131	149	3673		
<div>Q</div> <div>✎</div>	2441	SANTA CRUZ	ST	W			320	398	321	399	4348		

Features:

Street Management- Renaming Streets

APTM [User Guide](#) [Map](#) Welcome! gumapper1 STREET

+

-

?

Q

📍

📖

☰

💬

👤 Street Management

LFrom

350

RFrom

351

Pre Type

Street Name

SAN VICENTE

Neighborhood

Note

LTo

388

RTo

389

Pre Dir

W

Street Type

AVE

issue

Add New Alias

Save changes

Reset

Rural - Agat

v Agat

Features:

Address Management- Adding New House Number

APTM [User Guide](#) [Map](#) Welcome! gumapper1 ▾

STREET ▾

+

-

?

Q

Address Point

Address Point UPDATE

Enable Address Point Placement ☒

House No.	Dir	PreType	Street Name
<input type="text" value="129"/>	<div>W ▾</div>	<div>▾</div>	<div>JOSE HERERA</div>
Type	Unit	City	Neighbourhood
<div>ST ▾</div>	<div>Unit</div>	<div>AGAT</div>	<div>New Agat</div>
Place Name	Issue	Status	
<div></div>	<div></div>	<div>▾</div>	
Notes			
<div>Enter the something..</div>			
<div> Household 0</div>			<div>Add New +</div>
<div> Alias 0</div>			

Save

Add New +

Reset

M02 B24 L3

M02 B24 L4

M02 B24 L5

M02 B24 L6

M02 B24 L7

M02 B25 L10

M02 B25 L11

M02 B25 L12

M02 B25 L3

M02 B25 L4

M02 B25 L5

M02 B25 L6

M02 B25 L8

M02 B25 L9

New Agat

Result

Features:

Residential Verification - Adding New House Member

APTM User Guide Map Welcome! gumapper1 ▾

STREET ▾

Address Point

×

Add New Member

First Name *

Middle Name *

Last Name *

Date of Birth *

Citizenship *

Household *

Gender *

Email ID *

Contact No *

Work Contact *

Occupancy *

Note *

Close

Add Member

New Agat

M02 B24 L3

M02 B24 L4

M02 B24 L5

M02 B24 L6

M02 B24 L7

M02 B25 L10

M02 B25 L11

M02 B25 L12

M02 B25 L3

M02 B25 L4

M02 B25 L5

M02 B25 L6

M02 B25 L8

M02 B27 L11

M02 B27 L7

Coastal ARC Online

Overview

Website Application (coastalarconline.com)

- User Groups
 - Admin (ARC)
 - Reviewer (Department i.e. BSP)
 - Applicant (End User)
- Process for each user
 - Go through website pages
- Collaborative Review

Applicant User

Choose Application Type

ARC Hi applicant!

[Home](#)

[About Us](#)

[Profile ▼](#)

[Contact Us](#)

APPLICATION TYPE

[All forms](#)



Conditional Use



Zone Change



Summary zone
change



Zone Variance



Seashore clearance
permit and protection
commission

ZONE CHANGE

TO:Executive Secretary,
c/o Land planning Division, Department of Land Management:

The Undersigned owner(s)/lessee(s) of the following described propertyhereby request consideration for a *Zone Change*.

1. Information on Applicant:

Name of Applicant*

Name

Telephone No*

Business

Telephone No*

Home

Mailing Address*

Enter your address

U.S. Citizen*

☒ Yes ☐ No



NEXT


ARC Admin User

Choose Application from Dashboard

ARC Hi arcadmin!

Home About Us Profile ▾ Review ▾ Contact Us

All Applications


No.	Name of Applicant	Application Type	Mailing Address	Telephone No	Registered Owner	Status	Department(s) Assign
1 +	Samantha Cruz	Protection Commission	PO Box 123 Hagatna, Guam 96932	6717276148	Samantha Cruz	Pending	DPW x
2 +	Tina Muna	Summary Zone Change	PO Box 123 Hagatna, Guam 96932	6717276148	Tina Muna	Pending	DPR x
3 +	Joe Cruz	Conditional Use	PO Box 123 Hagatna, Guam 96932	6719292112	Joe Cruz	Pending	DAG x
4 + 	John Doe	Zone Change	PO Box 123 Hagatna, Guam	6717276148	John Doe	Approve	BSP x

Assign Department to Complete Review

ARC Hi arcadmin!

Home About Us Profile ▾ Review ▾ Contact Us

All Applications

No.	Name of Applicant	Application Type	Mailing Address	Telephone No	Registered Owner	Status	Department(s) Assign
1 +	Samantha Cruz	Protection Commission	PO Box 123 Hagatna, Guam 96932	6717276148	Samantha Cruz	Pending	DPW x
2 +	Tina Muna	Summary Zone Change	PO Box 123 Hagatna, Guam 96932	6717276148	Tina Muna	Pending	DPR x
3 +	Joe Cruz	Conditional Use	PO Box 123 Hagatna, Guam 96932	6719292112	Joe Cruz	Pending	DAG x
4 + 	John Doe	Zone Change	PO Box 123 Hagatna, Guam	6717276148	John Doe	Approve	BSP x

Make Comments if Needed

Protection Commission

Application ID: (110)

Applicant Information

Name of Applicant:
Samantha Cruz

Mailing Address:
PO Box 123 Hagatna, Guam 96932

Location, Description and Other

Municipality:
M09

Tr


Phone (Home) No.
6466352

Lot(s):
100

New Comment [X]

☐ Publish


Text here...

 Attachment ▼

Save

Add Comments +

Review Checklist



Complete Review Using Checklist

ARC Hi arcadmin!

[Home](#)

[About Us](#)

[Profile](#) ▾

[Review](#) ▾

[Contact Us](#)

Name of Applicant:

Telephone (Business) No.

Telephone (Home) No.

+ Review Application



1. Test - Test Category for workflow



a. Test question for workflow

☒ **yes** ☐ no ☐ other ☐ n/a

2. Test - Urban Development Conditional Use



a. Is this an urban development?

☐ yes ☒ **no** ☐ other ☐ n/a

3. Test - Category Test



4. Test - Test Workflow Category



a. Will the project pose unreasonable risk?

☒ **yes** ☐ no ☐ other ☐ n/a

[New Checklist](#)



Change Status to Approved

ARC Hi arcadmin!

[Home](#)

[About Us](#)

[Profile ▾](#)

[Review ▾](#)

[Contact Us](#)

Review requirement: Are other feasible alternative sites available?

Assessment: no

2018-12-21



Test - ArcAdmin Review Area for Zone Change

User: (arcadmin)

Review requirement: Is the proposed project dependent upon a coastal site?

Assessment: no

- Set Status
- Select Status
- ✓ Approve
- Application Accepted
- DisApprove
- Pending
- Review In-Progress

Save Review

ments

